

REV	APPLICATION	
	NEXT ASSY	USED ON
SHT	1	

NAVSEA DRAWING NO. 7325761
 ESWBS 499

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	SHEET 1: SIGNATURE BLOCK	7-7-98	K. HIGA
B	SHEET 1: DISTRIBUTION STATEMENT	7-24-98	K. HIGA
C	ALL SHEETS : REVISED PER REV L OF CHANGE NOTICE 1	7-24-98	K. HIGA
D	ALL SHEETS : REVISED PER REV A OF CHANGE NOTICE 2	7-31-99	K. HIGA

NOTES:

1. IDENTIFICATION OF THE SUGGESTED ITEMS HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY.
2. SUBSTITUTION OF ITEMS IS NOT ALLOWED WITHOUT APPROVAL OF THE DESIGN ACTIVITY, NSWCCD--SSES CODE 9631.
3. INDIVIDUAL ITEMS SHALL BE PROCURED USING THE VENDOR PART NUMBER.
4. COMPLETE KITS SHALL BE PROCURED USING THE BASE DRAWING NUMBER ONLY. COMPLETE KITS ARE DEFINED ON SHEET 3.
5. QUANTITIES SHOWN ARE FOR THE INDIVIDUAL ITEMS AND MAY NOT CORRESPOND TO THE QUANTITY SUPPLIED FOR THE VENDOR PART NUMBER LISTED.

REV STATUS OF SHEETS	REV	D	D	D	D	D	D	D												
	SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

DISTRIBUTION STATEMENT A: APPROVAL FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:	CAGE CODE CONTRACT NO.	DEPARTMENT OF THE NAVY NAVAL SEA SYSTEMS COMMAND WASHINGTON, D.C. 20362-5101						
FRACTIONS n	DECIMALS .XXn	APPROVED	G. Brown	6-30-98	PIERSIDE CONNECTIVITY, PIER KIT FIBER OPTIC, PIER INTERFACE TO SHIP			
ANGLES P	.XXXn	APPROVED	CDR M. ZIEGLER	7-7-98				
DO NOT SCALE DRAWING		APPROVED	D. INMAN	7-7-98				
		ENGINEER	E. Bluebond	6-30-98				
MATERIAL:	ACCEPTED FOR NAVSEA	H. LEWIS	7-7-98	SIZE	CAGE	ESWBS	DRAWING NO.	REV
FINISHES:	APPROVED BY NAVSEA	SIGNATURE DOES NOT DENOTE APPROVAL		A	53711	499	7325761	D
		(SIGN ONLY IF ENGINEERING HAS BEEN PROVED BY MANUFACTURE AND TEST)		SCALE: NONE	UCI	WT GRP	SHEET	1 OF 7

ESWBS 499
 WAFSEA DRAWING NO. 7325761
 SHEET 2
 REV D

**Pier interconnection
 box with patch panel**

**Hard Crank Spooling
 Device**

Pigtail Assembly

**Umbilical
 Assembly**

**Support
 Grip**

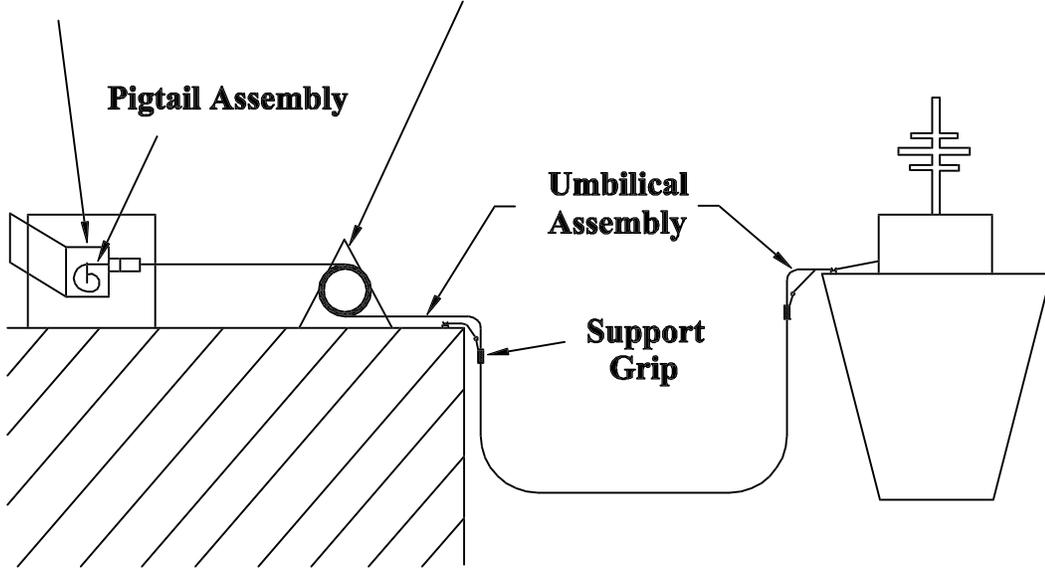


FIGURE 1. ITEMS OFFERED AS PART OF THIS DRAWING

SIZE A	CAGE 53711	ESWBS 499	DRAWING NO. 7325761	REV D
SCALE: NONE	UCJ	WT GRP	SHEET	2

REV

D

SHEET

3

7325761

NAVSEA DRAWING NO.

ESMBS

499

Pier Kit Contents

Items in this kit comprise the fiber optic cable plant components from the interconnection box at the pier to the umbilical assembly (cabling) connecting the pier to the ship.

Items offered as part of the pier kit are identified in Figure 1 on sheet 2. Items offered as part of the pier kit under the NAVSEA drawing number are identified in note 1/. The items on this drawing can be obtained separately using the item part number.

Custom orders may be desired. The quantity required for some items depends on the number of ship at a pier. Quantities for other items depend of the number of mooring stations (See note 2/). Guidance for the quantity of items to order is provided as follows:

1. Number of umbilical assemblies: Same quantity as the number of ships at the home port. 3/
2. Number of pigtail assemblies: Same quantity as the number of berths or mooring stations.
3. Number of interconnection boxes: Same quantity as the number of berths or mooring stations. 4/
4. Number of spooling devices: Same quantity as the number of umbilical assemblies ordered. 5/
5. Number of cross-connect cables: One-quarter the quantity as the number of berths or mooring stations in which nesting of ships occurs. 6/
6. Number of cable grips: Twice the quantity as the number of umbilical assemblies ordered (optional). 7/

Notes:

1/ For purposes of ordering a “pier kit” to the NAVSEA Drawing number, the pier kit is to include one umbilical assembly (item 6001AD), one pigtail assembly (item 6000AC configuration), one interconnection box (Option 3), six interconnection box patch panels (Option 3), 36 ST-to-ST adapters, one spooling device (Option 2), no cross-connect assembly, no lace closing split mesh cable grip.

2/ A mooring station is also known as a pier electrical distribution per MIL-HDBK-1025/2, service utility enclosure, concrete enclosure, steel enclosure, service camel, camel back, igloo, coffin box, etc.

3/ Umbilical assembly must be on the exterior of the ship or external to the ship. The umbilical assembly does not use a low smoke, low halogen, low toxicity cable that would be suitable for shipboard interior storage/use.

4/ ST-to-ST adapters must be supplied with each interconnection box. The ST-to-ST adapter must be provided as a separate item and is not included as part of the interconnection box or the patch panel. A quantity of 24 ST-to-ST adapters is needed for an interconnection box per Option 1 of table 1B. A quantity of 36 ST-to-ST adapters is needed for an interconnection box per Option 2 or Option 3 of table 1B. All 24 or 36 ST-to-ST adapters provided are to be for single mode fiber use.

5/ Spooling device can be obtained in two configurations. One configuration is for bulkhead/wall mounting (Option 1). The other configuration is for deck use/mounting (Option 2).

6/ Cross-connect cable is required when a nested ship is facing the opposite direction as the other ship(s) moored at that pier. The custodian of the cross-connect cable is assumed to be a shore activity, not the ship. If the cross-connect cable is specified as the ship’s equipment, then one per ship is recommended.

7/ Cable grips are one means to secure one end of the rope to the cable while the other end is secured to a cleat at the pier or on the ship. The laced cable grips are kept as a spare and used in the event that a closed mesh cable is damaged. Two closed mesh cable grips are originally supplied on the umbilical assembly.

SIZE	CAGE	ESMBS	DRAWING NO.	REV
A	53711	499	7325761	D
SCALE:	NONE	UCI	WT GRP	SHEET
				3

REV D
SHT 4
7325761
NAVSEA DRAWING NO.
ESWES 499

Table 1A. Pier Kit Parts List & Quantity

Item	Description	Quantity
6007AE	Pier Kit, Pierside Connectivity <u>4/</u>	1
6000AC	Pigtail assembly, hermaphroditic receptacle <u>1/</u> , <u>3/</u> , <u>5/</u>	1
6001AD	Umbilical assembly, pier-to-ship/ship-to-ship <u>2/</u> , <u>3/</u>	1
6001AE	Cable assembly, ship-to-ship, cross connect <u>2/</u> , <u>3/</u>	1
6007AA	Support grip, single eye, split mesh, lace closing, stainless steel <u>3/</u>	1
6007AB	ST-to-ST adapter, single mode, split ceramic alignment sleeve, nickel plated brass or stainless steel housing <u>3/</u>	36

Notes for table 1A:

- 1/ Pigtail assembly shall be in accordance with NAVSEA Drawing 7325760 Pierside Connectivity, Pigtail Assembly, Fiber Optic, Jam Nut Mounted Receptacle (Hermaphroditic) To ST Connector
- 2/ Umbilical assembly and the cross-connect cable shall be in accordance with NAVSEA Drawing 7325759 Pierside Connectivity, Fiber Optic, Ship-To-Pier
- 3/ Approval process for this item to be in accordance with NSWCCD-SSES Itr 9504 Ser 9542/27 of 13 Mar 98 or latest revision. Vendor quality system to be in compliance for COTS components.
- 4/ Item number 6007AE is comprised of items in note 1, page 3. The cable grip is optional.
- 5/ Substitute item 6000AB for item 6000AC for use with item 6003AF interconnection box. Substitute item 6000AD for larger interconnection boxes or other configurations with longer length requirements.

Table 1B. Interconnection Box Options At The Pier

Item	Description	Quantity
Option 1		
6003AE	Interconnection box, 24 port patch panel capacity <u>1/</u>	1
6003AF	ST patch panel for interconnection box, 24 port <u>1/</u>	1
Option 2		
0346	Interconnection box, without MCP, MIL-I-24728/1 <u>1/</u>	1
0351	ST patch panel for interconnection box, 48 port, MIL-I-24728/6 <u>1/</u>	1
6003AJ	Drip shield <u>1/</u>	1
Option 3		
6003AK	Interconnection box, 36 port patch panel capacity <u>1/</u>	1
6003AL	ST patch panel for interconnection box, 36 port <u>1/</u>	6

Notes for table 1B:

General notes on usage:

1. If concrete enclosure at pier, use one of the following:
 - a. 6003AE to be used/specified with 6003AF. Note: vented enclosure - application limited to enclosures offering partial protection from wind gusts and other means of dust/dirt penetration.
 - b. 0346 to be used/specified with 0351 and 6003AJ. Note: ten cover bolts required for entry/sealing. This configuration does not lead itself to regular entrance for patching.
 - c. 6003AL to be used/specified with 6003AK.
2. If external metal enclosure or other mounting surface at pier exposed to weather:
 - a. 6003AL to be used/specified with 6003AK.

SIZE	CAGE	ESWES	DRAWING NO.	REV
A	53711	499	7325761	D
SCALE:	NONE	UCI	WT GRP	SHEET 4

REV

D

SHT

5

7325761

MWSEA DRAWING NO.

ESWBS

499

3. If stand alone (no other service utility enclosure) where self support interconnection box is required:
 a. 6003AL to be used/specified with 6003AK.

Specific note:

1/ Approval process for this item to be in accordance with NSWCCD-SSES ltr 9504 Ser 9542/27 of 13 Mar 98 or latest revision. Vendor quality system to be in compliance for COTS components.

Table 1C. Pier Accessories Parts List & Quantity

Item	Description	Quantity
Option 1		
6007AC	Hand cranked spooling device for bulkhead/wall mounting 1/,2/	2
Option 2		
6007AD	Hand cranked spooling device for deck use/mouting 1/, 2/	1

Notes for table 1C:

1/ Component shall meet Appendix C of Commercial Item Description (CID) Cable, Fiber Optic, Pierside Use Only (Not For Inboard Or Outboard Use), 12 Breakout Cable Count, Multiple Classes (Single Mode, Multimode, Fiber-Hybrid), Draft dated 31 July 1999 or latest version.

2/ Approval process for this item to be in accordance with NSWCCD-SSES ltr 9504 Ser 9542/27 of 13 Mar 98 or latest revision. Vendor quality system to be in compliance for COTS components.

SIZE	CAGE	ESWBS	DRAWING NO.	REV
A	53711	499	7325761	D
SCALE:	NONE	UCI	WT GRP	SHEET 5

REV

D

SHT

6

7325761

MWSER DRAWING NO.

ESWS

499

Table 2. Pier Kit, Interconnection Boxes & Accessories Recommended Sources Of Supply

Item	Vendor Name	Part Number	Vendor Address	Vendor Phone/FAX
6000AB	Packard Hughes Interconnect	1123790H	17150 Von Karman Ave. Irvine, CA 19685	(949) 660-5704 (949) 660-6981
6001AD	Packard Hughes Interconnect	1123791-1H	17150 Von Karman Ave. Irvine, CA 19685	(949) 660-5704 (949) 660-6981
6001AE	Packard Hughes Interconnect	1123791-2H	17150 Von Karman Ave. Irvine, CA 19685	(949) 660-5704 (949) 660-6981
6007AB	Lucent Technologies, Inc.	105 271 142	2000 Northeast Expy Norcross, GA 30071	(770) 798-2930 (770) 798-2001
6003AE	Champion Products Inc.	CFD1024	Rt. 1, Box 422 Stafford, MO 65757-9634	(417) 736-2135 (417) 736-2662
6003AF	Champion Products Inc.	CFD1024PNST	Rt. 1, Box 422 Stafford, MO 65757-9634	(417) 736-2135 (417) 736-2662
0346	NMP Corp.	11401-104	P.O. Box 35493 Tulsa, OK 74153-0493	(918) 252-0481 (918) 250-5162
0351	NMP Corp.	11254-101	P.O. Box 35493 Tulsa, OK 74153-0493	(918) 252-0481 (918) 250-5162
6003AJ	NMP Corp.	11801-1	P.O. Box 35493 Tulsa, OK 74153-0493	(918) 252-0481 (918) 250-5162
6003AK	Siecor Broadband Products Division	EDC-06P-NH	9275 Denton Hwy. Keller, TX 76248	(817) 431-7180 (817) 431-7735
6003AL	Siecor Broadband Products Division	CCH-CP06-15TX	9275 Denton Hwy. Keller, TX 76248	(817) 431-7180 (817) 431-7735
6007AA	Hubble Precision Wiring, Inc.	02402013	185 Plains Rd. Milford, CT 06460	(203) 882-4800
	Amtec, Inc.	RS-050-SE-SS	30 Center Pkwy Plainfield, CT 06374	(800) 893-8397 (860) 230-0008
6007AC	American Durable Inc.	AD1001	6080 Claude Way East Inver grove Heights, MN 55076	(651) 455-6314 (651) 455-0322
	Mossberg Reel & Stamping Co., Inc.	C-STD-300268155-02	160 Bear Hill Rd. Cumberland, RI 02864	(401) 334-2255 (401) 426-0063
6007AD	American Durable Inc.	AD1001	6080 Claude Way East Inver grove Heights, MN 55076	(651) 455-6314 (651) 455-0322
	Mossberg Reel & Stamping Co., Inc.	C-STD-300268155-01	160 Bear Hill Rd. Cumberland, RI 02864	(401) 334-2255 (401) 426-0063

SIZE	CAGE	ESWS	DRAWING NO.	REV
A	53711	499	7325761	D
SCALE:	NONE	UCI	WT GRP	SHEET
				6

REV
DSPT
7

7325761

NASEA DRAWING NO.

ESMBS
499

Table 3 Spare Part Provisioning Kit 1/

Item	Description	Quantity
6007AF	Pier kit spare part provisioning per site 2/	2
6007AA	Support grip, single eye, split mesh, lace closing, stainless steel	4
6007AB	ST-to-ST adapter, single mode, split ceramic alignment sleeve, nickel plated brass or stainless steel housing	72
6003AK	Interconnection box, 36 port patch panel capacity	2
6003AL	ST patch panel for 36 port interconnection box	12
0331	ST connector, multimode, MIL-C-83522/16	100
0343	ST connector, single mode, MIL-C-83522/16	50
6000AC	Pigtail assembly, hermaphroditic receptacle, 1.5 m length	2

Notes for table 3:

1/ Quantity of spare umbilical assemblies (6001AD) and hand cranked spooling devices (6007AD) is based on the number of ships per site (not number of berths per site) and is not included in table 3.

2/ Item 6007AF is comprised of the other items listed in table 3.

SIZE A	CAGE 53711	ESMBS 499	DRAWING NO. 7325761	REV D
SCALE: NONE	UCI	WT GRP	SHEET	7